Prediction of optical modulation properties of twisted-nematic liquid-crystal display by improved measurement of Jones matrix

Baiheng Ma,[1,2] Baoli Yao,[1,a)] Tong Ye,[1] and Ming Lei[3]

[1]State Key Laboratory of Transient Optics and Photonics, Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, Xi'an 710119, China
[2]Graduate School of the Chinese Academy of Sciences, Beijing 100039, China
[3]College of Life Science and Shaanxi Key Laboratory of Molecular Biology for Agriculture, Northwest A&F University, Yangling 712100, People's Republic of China

1. Medir

$$I_1 = | < \mathbf{H}|SLM|\mathbf{H} > |^2, \quad I_2 = | < \mathbf{CD}|SLM|\mathbf{CD} > |^2, \quad I_3 = | < \mathbf{45°}|SLM|\mathbf{45°} > |^2,$$

$$I_1^\perp = | < \mathbf{V}|SLM|\mathbf{H} > |^2, \quad I_2^\perp = | < \mathbf{CI}|SLM|\mathbf{CD} > |^2, \quad I_3^\perp = | < \mathbf{-45°}|SLM|\mathbf{45°} > |^2$$